Application No.: 10/666,579

Amdt dated: October 17, 2006

Reply to Office action of August 17, 2006

**Amendments to the Claims:** 

This listing of claims will replace all prior versions, and listings, of claims

in the application.

**Listing of Claims:** 

1-16. (Canceled)

17. (Currently amended) A surgical access device facilitating a sealing

relationship with an instrument extending through the device and into an incision

in a body wall of a patient, the access device comprising.

a valve structure disposed relative to the incision in a sealing relationship

with the body wall around the incision and extending into communication with the

incision in the patient;

a cap ring inserted or molded into the valve structure;

a wound retractor adapted to dilate the incision;

a protective sleeve extending into communication with the incision, the

protective sleeve being bonded or molded around an inner diameter of the cap

ring;

a single seal included in the valve structure and disposed relative to the

incision in the body wall;

the single seal having a first state in the absence of an instrument

extending through the valve structure, and a second state in the presence of an

instrument extending through the valve structure;

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the single seal in the first state forming a zero seal in the absence of the instrument extending through the valve structure; and

the single seal in the second state forming a seal with the instrument in the presence of the instrument extending through the access device.

- 18. (Canceled)
- 19. (Canceled)
- 20. (Currently amended) The surgical access device of Claim [[19]] 17, wherein the protective sleeve provides for wound protection during insertion and withdrawal of the instrument.
- 21. (Currently amended) The A surgical access device of Claim 18, further facilitating a sealing relationship with an instrument extending through the device and into an incision in a body wall of a patient, the access device comprising:

a valve structure disposed relative to the incision in a sealing relationship with the body wall around the incision and extending into communication with the incision in the patient;

a cap ring inserted or molded into the valve structure;

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at least one support ring disposed circumferentially of the valve structure forming a hollow space,

wherein a wound retractor adapted to dilate the incision, the wound retractor [[is]] being operatively placed in the hollow space;

a protective sleeve extending into communication with the incision, the protective sleeve being bonded or molded around an inner diameter of the capring;

a single seal included in the valve structure and disposed relative to the incision in the body wall;

the single seal having a first state in the absence of an instrument extending through the valve structure, and a second state in the presence of an instrument extending through the valve structure;

the single seal in the first state forming a zero seal in the absence of the instrument extending through the valve structure; and

the single seal in the second state forming a seal with the instrument in the presence of the instrument extending through the access device.

22. (Original) The surgical access device of Claim 21, wherein the wound retractor includes an inner ring, an outer ring, and a flexible sleeve connecting the inner ring and the outer ring

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- 23. (Currently amended) The surgical access device of Claim [[19]] 17, wherein the protective sleeve is a single tubular member.
- 24. (Currently amended) The surgical access device of Claim [[19]] 17, wherein the protective sleeve comprises a plurality of axially extending sleeve members having a plurality of axial slits.

25-35. (Canceled)

36. (Currently amended) A low-profile surgical valve structure adapted for disposition relative to an incision in a body wall and proximate an outer surface of the body wall, the incision being retracted by an incrementally adjustable wound retractor having an inner ring, an outer ring, and a flexible sleeve connecting the inner ring to the outer ring, the inner ring expanding around an inner edge of the incision, the outer ring expanding around an outer edge of the incision, portions of the flexible sleeve extending outside the incision being rolled around the outer sleeve to retract the incision, thereby forming a channel through the body wall and into a body cavity, the valve structure facilitating insertion of a surgical instrument through the valve structure and maintenance of a sealing relationship with the surgical instrument, comprising:

a gel pad adapted to be disposed over the incision and forming a seal with the wound retractor, the gel pad including a gel material comprising Kraten

Styrene-Ethylene/Butylene-Styrene block copolymer and oil, and a slit formed in

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the pad to provide an access opening through the pad, the slit being adapted to extend into communication with the incision[[,]]; and

a circumferential cap ring molded to the gel pad, the cap ring being adapted to removably couple the valve structure to the outer ring of the wound retractor,

wherein the access channel forms a zero seal in the absence of an instrument extending therethrough and an instrument seal in the presence of an instrument extending therethrough.

- 37. (Previously presented) The valve structure of Claim 36, the cap ring forming a hollow space adapted to receive the wound retractor.
- 38. (Previously presented) The valve structure of Claim 36, wherein the gel pad includes a single access opening.
- 39. (Previously presented) The valve structure of Claim 36, further comprising at least one additional access opening in the gel pad, the at least one additional access opening being formed by inserting an instrument through the gel pad away from the slit.